

## **Datasheet: DTX Fiber Module Series**

With today's demands on high-speed data networks containing both fiber optic and twisted-pair cabling, it's more important than ever to certify and document multiple media types to ensure a properly executed installation.

The DTX CableAnalyzer<sup>™</sup> enables you to certify fiber optic cabling with onboard fiber modules. More convenient and powerful than other fiber optic test solutions, these modules enhance certification with two-fiber, dual wavelength testing and professional documentation of test results using LinkWare <sup>™</sup>. Not only can you certify both fiber and copper cables, but you can do it faster and more efficiently than you ever imagined.

With the latest introduction of the Encircled Flux (EF) Multimode Fiber Modules, the DTX CableAnalyzer provides an efficient and practical solution that complies with the EF requirements of TIA-526-14-B and IEC 61280-1-4.



DTX-1800-E

### The DTX Fiber Advantage:

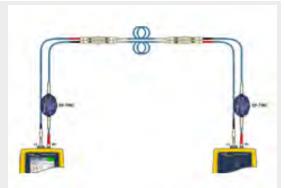
- Fiber on-board when you need it
- Dual-wavelength testing for 2 fibers in less than 12 seconds
- Encircled Flux Compliant Multimode fiber testing
- Delivers Tier 1 LinkWare fiber certification reports
- Locates fibers, verifies continuity and polarity, and finds breaks with built-in VFL
- Supports SC, LC, FC, ST interchangable power meter adapters
- · Supports one-jumper reference method as preferred by cabling industry



DTX-EFM2

#### **Record Fast Fiber Certification**

We engineered the DTX Fiber Modules to accelerate testing through exclusive technology and an easy-to-use interface. Press the Autotest button and automatically test two fibers, each at two wavelengths, measure length, and determine pass or fail status – all in about 12 seconds. Our fiber modules let you test more fibers in less time, minimizing testing costs and freeing you up for other tasks.



Unlike competitive fiber adapters which measure length and two loss measurements per Autotest, DTX is the only fiber test solution that measures length and four loss measurements per Autotest - all in about 12 seconds.

#### **Deliver Complete Tier 1 (Basic) Certification**

DTX fiber modules provide a complete certification solution – loss, length and polarity. Validate fiber link performance and installation quality. Measure optical loss at multiple wavelengths, measure fiber length and verify polarity. You can bi-directionally test two fibers at two wavelengths with incredible speed without swapping main and remote units, a capability only available from Fluke Networks.

#### **Certify Multimode and Singlemode Fiber**

Your network may contain both multimode or singlemode fiber types. By combining 2 sets of modules, you can certify any multimode and singlemode fiber at 850, 1300, 1310, and 1550nm. Then save, upload, manage and print comprehensive certification reports using Fluke Networks LinkWare software.

#### **Encircled Flux Compliant Multimode Fiber Testing**

TIA-526-14-B and IEC 61280-1-4 now require tighter launch conditions to reduce measurement uncertainty. With the DTX-EFM2, users who are familiar with the DTX CableAnalyzer can easily make use of these new modules to perform EF compliant testing with no additional training. The DTX-EFM2 with the Encircled Flux Test Reference Cords (EF-TRCs) provide the most efficient and practical EF standards compliant testing solution. These EF-TRCs are individually tuned so that any DTX-EFM2 produces an EF compliant launch at the end of the EF-TRC.

#### **Find Faults Faster**

Use the integrated on-module visual fault locator (VFL) to troubleshoot simple link problems. The bright laser-driven VFL helps you visually locate many near-end fiber faults, and is useful for continuity and polarity verification. Our integrated design ensures that the VFL is always on-hand when you need it.

#### You Only Need One Compact Field Tester

Fluke Networks is committed to providing innovative solutions for testing and certifying copper and fiber cabling systems. Simply add these powerful modules to your DTX CableAnalyzer to certify, troubleshoot and document your fiber installations – today and tomorrow – with one compact field tester.

# **Selected Specifications**

Optical Specifications (23°C)	
Input (Meter) connectors	Removable SC adapter standard with product. Optional interchangable adapters: LC, ST and FC
Output (Source) connectors	Fixed SC adapter
Source type and nominal wavelength	DTX-MFM2: 850 nm LED and 1300 nm LED DTX-EFM2: 850 nm LED and 1300 nm LED DTX-SFM2: 1310 nm FP laser and 1550 nm FP laser
Source power	DTX-MFM2: ≥ -20 dBm, DTX-SFM2: ≥ -7 dBm
Length measurement	DTX-MFM2: $\leq$ 5,000 m of 62.5 or 50 $\mu$ m fiber DTX-EFM2: $\leq$ 5,000 m of 62.5 or 50 $\mu$ m fiber DTX-SFM2: $\leq$ 10,000 m of 9 $\mu$ m singlemode fiber
Power meter type	InGaAs detector
Power measurement range	0 to -60 dBm (1310 nm and 1550 nm) 0 to -52 dBm (850 nm)
Launch condition for DTX-EFM2 with EF-TRC*	Encircled flux compliant to TIA 455-526-14-B, ISO/IEC 14763-3, and IEC 61280-4-1
VFL Specifications (23°C)	
Laser type and nominal wavelength	Class II CDRH, 650 nm
Output modes	Continuous wave and flashing mode
Connector adapter	2.5 mm universal
Environmental Specifications	
Operating temperature	0°C to 40°C
Storage temperature	-20°C to 60°C
Safety	CE, CSA, EN 61010-1
General Specifications	
Dimensions (L x W x D), nominal	4.2" x 3.0" x 1.1" (106 mm x 76 mm x 28 mm)
Weight, nominal	0.31 lb (0.14 kg)

<sup>\*</sup>Footnote:

1) At the output of the EF-TRC

2) Variations between EF measurement equipment may occur but EF compliance can be expected with a 95% confidence factor

# **Ordering Information**

Models	Descriptions
DTX-EFM2	Set of two DTX Encircled Flux Multimode Fiber Modules, each incorporating:  850 nm and 1300 nm LED sources combined into a single output port  Set of Encircled Flux compliant test reference cords (EF-TRC)  Removable SC power meter port adapter. Compatible with interchangable LC, ST, FC adapters.  Power meter calibrated at 850/1300/1310/1550nm  Integrated VFL
DTX-MFM2	Set of two DTX Multimode Fiber Modules, each incorporating:  • 850 nm and 1300 nm LED sources combined into a single output port  • Set of Multimode test reference cords  • Removable SC power meter port adapter. Compatible with interchangable LC, ST, FC adapters.  • Power meter calibrated at 850/1300/1310/1550nm  • Integrated VFL
DTX-SFM2	Set of two DTX Multimode Fiber Modules, each incorporating:  1310 nm and 1550 nm laser sources combined into a single output port  Removable SC power meter port adapter. Compatible with interchangable LC, ST, FC adapters.  Power meter calibrated at 850/1300/1310/1550nm  Integrated VFL
DTX-1800-E	DTX-1800 and Set of two DTX Encircled Flux Multimode Fiber Modules, each incorporating:  850 nm and 1300 nm LED sources combined into a single output port  Set of Encircled Flux compliant test reference cords (EF-TRC)  Removable SC power meter port adapter. Compatible with interchangable LC, ST, FC adapters.  Power meter calibrated at 850/1300/1310/1550nm  Integrated VFL
Accessories	Descriptions
MRC-50EFC-SCLCKIT	Encircled Flux compliant test reference cord kit for testing 50µm LC terminated fibers. Contains: 2 2m EF-TRCs with SC/LC, 2 2m TRCs with LC/LC
MRC-50EFC-SCSCKIT	Encircled Flux compliant test reference cord kit for testing 50µm SC terminated fibers. Contains: 2 2m EF-TRCs with SC/SC, 2 2m TRCs with SC/SC
MRC-50EFC-SCSTKIT	Encircled Flux compliant test reference cord kit for testing 50µm ST terminated fibers. Contains: 2 2m EF-TRCs with SC/ST, 2 2m TRCs with ST/ST
MRC-50EFC-SCFCKIT	Encircled Flux compliant test reference cord kit for testing 50µm FC terminated fibers. Contains: 2 2m EF-TRCs with SC/FC, 2 2m TRCs with FC/FC
MRC-625EFC-SCLCKIT	Encircled Flux compliant test reference cord kit for testing 62.5µm LC terminated fibers. Contains: 2 2m EF-TRCs with SC/LC, 2 2m TRCs with LC/LC
MRC-625EFC-SCSCKIT	Encircled Flux compliant test reference cord kit for testing 62.5µm SC terminated fibers. Contains: 2 2m EF-TRCs with SC/SC, 2 2m TRCs with SC/SC
MRC-625EFC-SCSTKIT	Encircled Flux compliant test reference cord kit for testing 62.5µm ST terminated fibers. Contains: 2 2m EF-TRCs with SC/ST, 2 2m TRCs with ST/ST
MRC-625EFC-SCFCKIT	Encircled Flux compliant test reference cord kit for testing 62.5µm FC terminated fibers. Contains: 2 2m EF-TRCs with SC/FC, 2 2m TRCs with FC/FC
DTX Fiber Module Gold Support	
GLD-DTX-FIBERMOD	1 Year GOLD Support for DTX-MFM2 or DTX-SFM2
GLD-DTX-EFM2	1 Year GOLD Support for DTX-EFM2

Visit www.flukenetworks.com/dtx for additional accessories and GOLD support ordering information on the DTX Fiber Modules



Fluke Networks operates in more than 50 countries worldwide.

To find your local office contact details, go to www.flukenetworks.com/contact.

@ 2013 Fluke Corporation. Rev: 04/04/2013 7:53 pm (Literature ld: 2131174)